Article Assignment 4-Cyber Security

In the article "Google is switching from SMS to QR codes for Gmail authentication," The Verge states that Google will substitute SMS-based two-factor authentication (2FA) codes with QR codes for users of Gmail. This is performed in an effort to enhance security by removing SMS authentication vulnerabilities such as interception and social engineering attacks. Users will be prompted to scan a QR code on their phones through smartphone cameras later this year as an alternative to the traditional six-digit SMS codes for verification

This shift is related to cybersecurity, as it steps in for the vulnerabilities inherent in SMS-based authentication. SMS codes are usable through other methods too, like SIM swapping and phishing attacks, which are severe security concerns. By incorporating QR code-based authentication, Google is seeking to provide a secure and easier means of using these without leaving any scope for unapproved account access.

The primary stakeholders involved in this scenario are Gmail users, whose authentication process will be modified, Google, which is adding the new security feature, and attackers who may find it more difficult to hack accounts that have been secured using QR code-based 2FA. Individually, this move by Google is a good step in the direction of enhancing user account security.

As discussed in the article, multi-factor authentication (MFA) is a key factor in protecting accounts from unauthorized access. However, not all MFA systems are created equal. SMS-based 2FA has been criticized for its vulnerabilities, leading service providers to adopt more secure alternatives. By employing QR code-based authentication, Google is not just protecting things but also streamlining the experience, which could potentially lead to more people embracing 2FA.

Works Cited

Holt, Kris. “Google Is Replacing Gmail’s SMS Authentication with QR Codes.” *The Verge*, 22 Feb. 2025, https://www.theverge.com/news/618303/google-replacing-sms-codes-qr-gmail-security-two-factor-authentication. Accessed 25 Feb. 2025.